National and State Resource Concerns and Quality Criteria								
Natural	Natural Description of National Quality Missouri Quality Measurement Assessment Tools							
Resource	Concern	Criteria	Criteria	Units	for			
Concern					Quality Criteria Evaluation			
AIR								

Air Quality Particulate matter less than 10 micrometers in diameter (PM 10)	Particulate matter less than 10 micrometers in diameter are suspended in the air causing potential health hazards to humans and animals.	Land use and management operations comply with PM 10 requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations	Same as National.	pounds/year – average annual pounds of reduced PM-10 emissions for the field or planning area/unit	•	Specific guidelines contained in State or Federal Implementation Plan Air quality analysis Visual observation
Air Quality Particulate matter less than 2.5 micrometers in diameter (PM 2.5)	Particulate matter less than 2.5 micrometers in diameter are suspended in the air causing potential health hazards to humans and animals.	Land use and management operations comply with PM 2.5 requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	Same as National.	pounds/year – average annual pounds of reduced PM-2.5 emissions for the field or planning area/unit	•	Specific guidelines contained in State or Federal Implementation Plan Air quality analysis
Air Quality Excessive Ozone	High concentrations of ozone are adversely affecting human health, reducing plant yields, and creating smog.	Land use and management operations reduce ozone precursors and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	Same as National	pounds/year – average annual pounds of reduced ozone precursors emissions for the field or planning area/unit	•	Specific guidelines contained in State or Federal Implementation Plan Air quality analysis
Air Quality	Increased CO ₂ concentrations are	Land use and management operations reduce CO ₂	Same as National	Non Measurable	•	Model simulations (Century, EPIC, CQUESTER)
Excessive	adversely affecting	emissions into the atmosphere				
Greenhouse Gas – CO ₂	ecosystem processes.	and comply with requirements of the State or Federal				
(carbon dioxide)		Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.				

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National and State Resource Concerns and Quality Criteria							
Natural Description of National Quality Missouri Quality Measurement Assessment Tools							
Resource	Concern	Criteria	Criteria	Units	for		
Concern					Quality Criteria Evaluation		
AIR							

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Air Quality	Increased N ₂ O	Land use and management	Same as National	Non	•	Model simulations (NLEAP or
	concentrations are	operations reduce N ₂ O		Measurable		DayCENT)
Excessive	adversely affecting	emissions into the atmosphere			•	IPCC methodology
Greenhouse	ecosystem processes.	and comply with requirements				
Gas − N ₂ O		of the State or Federal				
(nitrous oxide)		Implementation Plan and all				
		applicable Federal, Tribal,				
		State, and Local regulations.				
Air Quality	Increased CH₄	Land use and management	Same as National	Non	•	IPCC methodology
	concentrations are	operations reduce CH ₄		Measurable		0.
Excessive	adversely affecting	emissions into the atmosphere				
Greenhouse	ecosystem processes	and comply with requirements				
Gas – CH₄		of the State or Federal				
(methane)		Implementation Plan and all				
		applicable Federal, Tribal,				
		State, and Local regulations.				
Air Quality	Animal waste and	Land use and management	Same as National	pounds/year -	•	Scent assessment
7 iii Quanty	inorganic commercial	operations reduce NH ₃	Came as realistal	average annual		Cochi doscosment
Ammonia (NH ₃)	fertilizers emit ammonia	emissions into the atmosphere		pounds of		
7 (11113)	that contributes to odor, is	and comply with requirements		reduced NH3		
	a PM2.5 precursor, and	of all applicable Federal, Tribal,		emissions for		
	contributes to acid rain.	State, and Local regulations.		the field or		
	Contributes to dela rain.	Otate, and Local regulations.		planning		
				area/unit		
Air Quality	Materials applied to	Land use and management	Same as National	Non		Visual assessment
7111 Quanty	control pests drift	operations reduce chemical	Carrie as Mational	Measurable	•	Visual assessifient
Chemical Drift	downwind and	drift into the atmosphere and		Measurable		
Onemical Dint	contaminate/injure non-	comply with all applicable				
	targeted fields, crops,	Federal, Tribal, State, and				
	soils, water, animals and	Local regulations, and				
	1	applicable label directions.				
Air Quality	humans. Land use and		Same as National	Non	<u> </u>	Coort coorsent
Air Quality		Odor-producing facilities and	Same as National	-	•	Scent assessment
Ohioaticaslala	management operations	activities are planned and sited		Measurable	•	Agricultural Waste
Objectionable	produce offensive smells.	to mitigate potential nuisance				Management Field Handbook
Odors		impacts and meets all				(AWMFH)
		applicable Tribal, Federal,				
		State, and Local regulations.				

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National and State Resource Concerns and Quality Criteria							
Natural Resource Concern	Description of Concern	National Quality Criteria	Missouri Quality Criteria	Measurement Units	Assessment Tools for Quality Criteria Evaluation		
AIR							

Air Quality Reduced Visibility	Sight distance is impaired due to airborne particles causing unsafe conditions and impeded viewing of natural vistas especially in Class I viewing areas (primarily national parks and monuments).	Land use and management operations reduce particle emission into the atmosphere and comply with all applicable Federal, Tribal, State, and local regulations, including State and local smoke and/or burn management plans.	Same as National	Non Measurable	Visual assessment Regional air partnership recommendations state guidance for smoke management
Air Quality Undesirable Air Movement	Wind velocities (too little or too much) reduce animal or plant productivity, impact human comfort and increase energy consumption.	Devices and practices are sited and planned to mitigate excess or deficient air movement.	Same as National	Non Measurable	Visual assessmentAnemometers
Air Quality Adverse Air Temperature	Air temperatures (too cold or too hot) reduce animal or plant productivity, impact human comfort and increase energy consumption.	Devices and practices are planned and sited to mitigate temperature extremes.	Same as National	Non Measurable	 Chill factor indices Heat indices Air temperature assessment

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